

Engineering Foundation Conferences

The Engineering Foundation Conferences are annual, informal meetings in which problems related to engineering are defined and discussed by participants from the fields of engineering, science, government, and economics. Some of the attendees are invited by the conference chairman, and the rest are selected by the chairman from those who have applied to the Engineering Foundation. Attendance is limited to 100 to 125 persons. The fees and arrangements are the same as those for the 1971 meetings (1).

The following 22 conferences will be held this summer.

"Environmental Engineering in the Food Industry"; 25-30 June, New England College, Henniker, New Hampshire; Robert I. Lachman, Cornell University, chairman. Attendees at the conference will deal with in-plant surveys, sample, measure, analyze, and evaluate wastes within a plant.

"Public Transportation in Urban Areas"; 9-14 July, New England College; Kenneth W. Heathington, Purdue University, and James A. Scott, Highway Research Board, cochairmen. In this conference, solutions to various problems in public transportation will be explored. Attention will be given to such problems as financing, operation, planning, labor, standards, and implementation.

"Women in Engineering and Management"; 16-21 July, New England College; Olive Salembier, Society of Women Engineers, and A. C. Ingersoll, University of California, Los Angeles, cochairmen. The 1971 conference on women in engineering and events in the nation and the engineering profession have demonstrated that the door is open for women to enter engineering, both in engineering schools and in the profession, and that there has been some progress in encouraging talented young women toward engineering. The 1972 conference will be devoted to the most cogent of the questions raised in 1971: Once admitted to the engineering profession, how do we get promoted to

positions of management, with greater responsibility, prestige, and income? Hence, the theme of the 1972 conference is advancement of women engineers in government, industry, or education.

"Technology Assessment—Problems and Practice"; 23-28 July, New England College; Joel Goldhar, Rensselaer Polytechnic Institute of Connecticut, Inc., and Raphael Kasper, George Washington University, cochairmen. The purpose of the conference is to promote the exchange of information and ideas relating to the operational aspects of technology assessment among representatives of public, private, and academic organizations in an effort to set the stage for future cooperation.

"Resolving Some Selected Issues of National Materials Policy"; 30 July-4 August, New England College; Franklin P. Huddle, Library of Congress, chairman. This conference is designed to generate a consensus on some major policy issues among persons in the materials community, to aid the National Commission on Materials Policy, and to provide for exchange of views on these issues within the materials community. The subjects to be covered are how to strengthen the entire materials cycle, identify requirements for action by the federal government, provide for continuing oversight at a high executive level, and develop quick response capability.

"Making Graduate Engineering More Relevant to Industrial Needs"; 6-11 August, New England College; Milton C. Shaw, Carnegie-Mellon University, chairman. The objectives of this conference are to better understand how graduate engineering reached its present position and to help formulate plans for making graduate training more responsive to industrial needs. The subjects to be treated are recent history of graduate engineering education, estimated engineering manpower requirements for the future, techniques for strengthening the interface between industry and the university and for better

meeting industrial needs, and a review of the changing role of government in influencing graduate education.

"Engineers' Role in Today's Society"; 13-18 August, New England College; Charles O. Harris, General Motors Institute, chairman. The purpose of the conference is to examine the issues with which engineering is faced today and to seek a definition of the role of the engineer. The subjects to be discussed are social movements, engineering characterology, technological-societal confrontations, engineering identity, and engineering employment.

"Research Strategy for Electric Power Needs of the Future"; 20-25 August, New England College; E. W. Greenfield, Washington State University, chairman. Representatives of the electric power industry and the universities will attempt to arrive at a mutual understanding of the magnitude of the challenge facing the power industry. The role of the universities in sharing the research burden will be explored.

"Technological Futures for Offshore Oil—Accident Prevention and Response"; 2-7 July, Berwick Academy, South Berwick, Maine; Charles C. Patton and Irvin L. White, University of Oklahoma, cochairmen. A range of people interested in and working to develop the technologies upon which the conference is to focus will attend. The subjects to be covered are drilling technologies and blowout prevention, surface and subsea production technologies, safety devices, especially storm chokes and down-hole safety devices, and cleanup technologies (biological, chemical, and mechanical) for open sea and sheltered water. The major emphasis will be on techniques being developed to minimize risk and limit harmful effects.

"Health Services in the Year 2000"; 9-14 July, Berwick Academy; Richard K. C. Hsieh and Frank R. Mark, Health Service and Mental Health Administration, Public Health Service, cochairmen. The conference will bring together individuals and organization repre-

sentatives actively engaged in planning future health systems, subsystems, or uses of advanced technology. These will be discussed and presented by visual display. Consideration will be given to which plans or models, or both, should be displayed at various exhibits and demonstrations of the 1976 United States bicentennial celebration or be given special visibility through the communication media at that time.

"Vulnerability of Urban Areas to Subversive Disruption"; 16-21 July, Berwick Academy; David Rosenbaum, MITRE Corporation, Chairman. The purpose of this conference is to define a comprehensive but balanced assessment of the risks, vulnerabilities, capabilities, and intentions for subversive disruption.

"Control Strategies for Power Systems"; 23-28 July, Berwick Academy; L. H. Fink, Philadelphia Electric Company, and H. G. Kwatny, Drexel University, cochairs. This conference is designed to provide an interchange in which the principal objectives and constraints of modern power system control may be defined and clarified. Attention will be focused on the most promising developments in control system analysis and design.

"Energy Research Priorities"; 30 July-4 August, Berwick Academy; Donald D. Dunlop, management consultant, Fairfax, Virginia, chairman. The several research budgets proposed will be analyzed, and an optimum policy for government in energy research will be recommended. Many aspects of our energy problems have been addressed separately; this conference will deal with energy research in its broadest form.

"Research on Coal Mine Safety and Survival"; 6-11 August, Berwick Academy; Thomas V. Falkie, Pennsylvania State University, chairman. Recent or in-progress research in the United States and abroad directed toward mitigating the health and life hazards associated with coal mining will be reviewed. Presentations and discussions will deal with generation, characterization, measurement, prevention, and control of coal dusts and methane; advances in mine ventilation; disaster prevention and control; noise effects and control; communications developments; remote control technology; hazard analysis; research on mechanical and electrical hazards and equipment design; materials handling; ground control and

prediction; and other coal mine health and safety topics.

"Improving Indoor Air Quality"; 13-18 August, Berwick Academy; John R. Swanton, Jr., Arthur D. Little, Inc., chairman. The objective of the conference is to review indoor air pollution control and indicate areas that need further research. The indoor air quality that is provided by present air conditioning systems and that might be provided by improved systems will be discussed, from the points of view of personal comfort and the protection of equipment and building contents.

"Modern Concepts in Corrosion Engineering"; 20-25 August, Berwick Academy; N. G. Feige, Titanium Metals Corporation of America, chairman. The conference is designed for the qualified, professional corrosion engineer, to explore new ideas in corrosion technology with which he may not come into daily contact. Topics include a definition of corrosion engineering; a review of the people involved, the sources of information, and the economic restraints; how to evaluate materials; prevention of corrosion attack on materials; repair and replacement in the field.

"Energy Technologies for the Future"; 23-28 July, Vermont Academy, Saxtons River, Vermont; R. E. Balzhiser, Office of Science and Technology, Executive Office of the President, and D. L. Katz, University of Michigan, cochairs. The conference will deal with coal gasification; solar, geothermal, and backup breeder technologies; fusion; and advanced conversion systems.

"Short-Range Forecasting in Electric Power Systems"; 30 July-4 August, Vermont Academy; Carl F. Evert, University of Cincinnati, chairman. This conference will provide an opportunity for engineers from the electric power industry to gain an overview of present practices in load forecasting. This will include techniques, economics, recent research, and future requirements. One session will be devoted to problems of long-term forecasting methods, and workshops will provide for direct contributions by all participants.

"Engineering in Medicine—Automatic Cytology"; 6-11 August, Vermont Academy; Kendall Preston, Jr., Perkin-Elmer Corporation, chairman. Presentations dealing with cell delivery systems, sample preparation, and cytochemistry, and progress reports on selected programs will be given. Workshops on cytochemistry, fluid flow tech-

niques, digital pattern recognition, optical pattern recognition, software systems, scanning systems, and computer systems and techniques will be held.

"Evaluation of Sanitary Landfill Design and Operational Practices"; 13-18 August, Vermont Academy; Robert K. Ham, University of Wisconsin, chairman. The purpose of the conference is to identify rational bases for the design and operation of sanitary landfills. This will be done by examining the present state of the art and by attempting to identify gaps in knowledge between that applied in present practice and sound scientific evidence. Narrowing these gaps is an aim of this conference. It is expected that a position paper will be written at the close of the conference.

"Particulate Matter Systems"; 20-25 August, Vermont Academy; Richard Klimpel, Dow Chemical Company, chairman. New developments and research in the field of fracturing minerals and particulate technology in North America and abroad will be presented. Topics include the chemistry and physics of fracture phenomena and crushing, the application of particulate technology to mineral processes, methods of size distribution measurement, the relationship of particulate technology to problems of our society, and mixing and segregation phenomena.

"Earthquake Protection of Underground Utility Structures"; 5-9 September, Asilomar Conference Grounds, Pacific Grove, California; John F. Szabla, Washington State University, chairman. The effect of seismic disturbances in relation to man's increasing use of belowground structures and systems will be reviewed, and the possibilities of mitigating damage will be explored. Topics to be treated are phenomenal aspects of earth movements, survey of earth shock damage to man-made underground structures, present construction practices in underground structures, research strategies, and designs for damage mitigation.

Additional information and application forms are available from the author.

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Reference

1. S. S. Cole, *Science* **172**, 603 (1971).